

# Noxious Weeds of the Klamath National Forest



## Field Identification Handbook

Blue Ridge Saddle, Salmon River Ranger District  
Photo by Danika Carlson



**This information is subject to change. For current information contact:**

Klamath National Forest

Supervisor's Office

1711 South Main Street

Yreka, CA 96097

(530) 842-6131 (voice) or (800) 877-8339 (TDD)

The United States Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs and marital or familial status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint, write the Secretary of Agriculture, US Department of Agriculture, Washington, D.C., 20250, or call 1-800-245-6340 (voice), or 202-720-2600 (TDD). USDA is an equal employment opportunity



# Table of Contents

## Sunflower Family - Asteraceae

Spotted knapweed.....	4
Diffuse knapweed.....	6
Meadow knapweed.....	8
Squarrose knapweed.....	10
Russian knapweed.....	12
Musk thistle.....	14
Canadian thistle.....	16
Italian thistle.....	18
Scotch thistle.....	20
Taurian thistle.....	22
Yellow starthistle.....	24

## Borage Family - Boraginaceae

Houndstongue.....	26
-------------------	----

## Mustard Family - Brassicaceae

Dyer's woad.....	28
Whitetop.....	30

## Mustard Family continued

Lens-podded whitetop.....	32
Hairy whitetop.....	34
Perennial pepperweed.....	36

## Spurge Family - Euphorbiaceae

Leafy spurge.....	38
-------------------	----

## Pea Family - Fabaceae

Scotch broom.....	40
French broom.....	42
Sweet pea.....	44

## Grass Family – Poaceae

Cheat grass.....	46
Medusahead.....	48

## Rose Family - Roseaceae

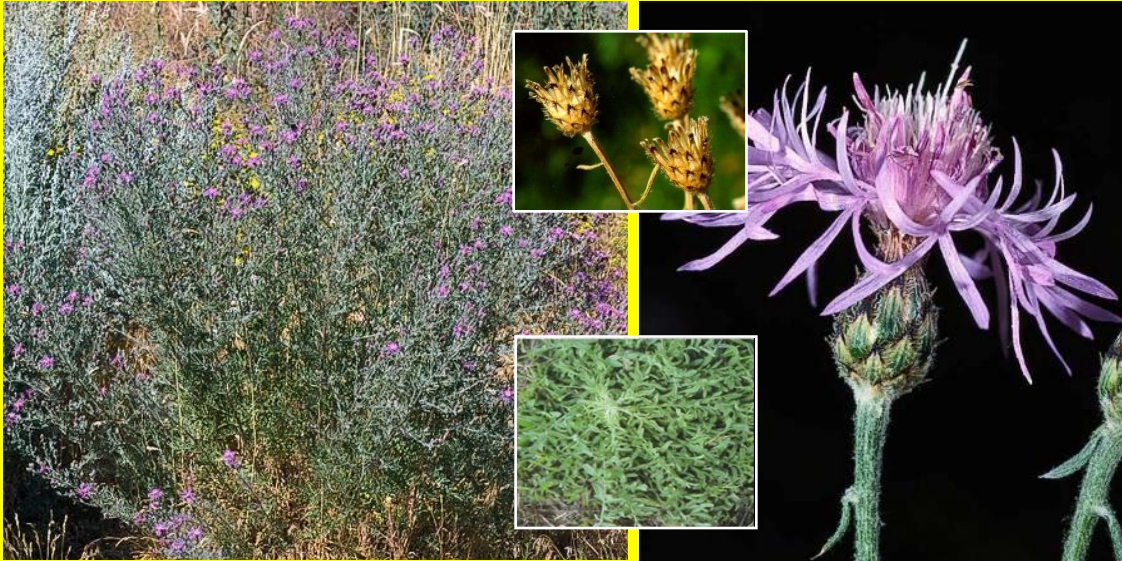
Sulphur cinquefoil.....	50
-------------------------	----

## Caltrop Family – Zygophyllaceae

Puncture vine.....	52
--------------------	----



Spotted Knapweed – *Centaurea maculosa* Lam.



Pictures by: J.M DiTomaso and E.A. Healy, © 2007 Weeds of California and other Western states, The Regents of the University of California

Inset: Pictures from unknown internet source

**KNF Priority: HIGH**

**Habitat:** Disturbed areas, well-drained soils, rangeland

**Life Cycle:** Biennial or short lived perennial from deep tap root

**Height:** 1-4 feet tall

**Leaves:** Rosette leaves deeply lobed, stem leaves entire to shallowly-lobed

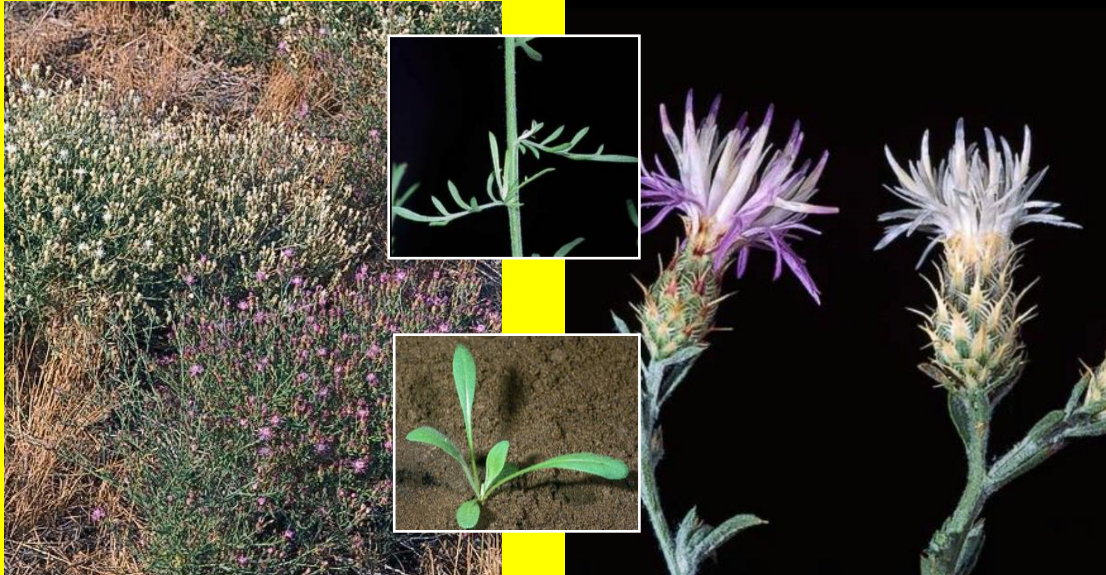
**Flowers:** Pink to purple in small clusters of 1-3

**Flower bracts (phyllaries):** tips are black and fringed, flowers appear spotted

**Seeds:** Can produce 25,000 seeds that remain viable for more than 15 years

**Bloom:** June to October

Diffuse Knapweed – *Centaurea diffusa* Lam.



**KNF Priority: HIGH**

**Also Known As:** White Knapweed

**Habitat:** Roadsides, fields, pastures, and waste areas

**Life Cycle:** Biennial, highly branched with tumbleweed appearance from tap-root

**Height:** 1-3 feet tall

**Leaves:** Gray-green, deeply lobed, increasingly smaller near top of stem

**Flowers:** Pink to purple in small clusters of 1-3

**Flower bracts (phyllaries):** pale green, fringed with straw-colored spines

**Bloom:** June to September



Meadow Knapweed – *Centaurea pratensis* Thuill.



**KNF Priority: HIGH**

**Also Known As:** Short-fringed or Tyrol Knapweed

**Habitat:** Disturbed fields, pastures, meadows, waste areas with higher moisture content

**Life Cycle:** Perennial

**Height:** 1-3.5 feet tall

**Leaves:** Entire to irregularly lobed

**Flowers:** Purple to red flowers produced terminally

**Bloom:** July to September

**Other:** Hybrid between black and brown knapweed. Traits highly variable

Squarrose knapweed – *Centaurea squarrosa* Willd.



**KNF Priority: HIGH**

**Habitat:** Disturbed areas, gravelly areas, roadsides

**Life Cycle:** Long-lived perennial from tap-root

**Height:** 1-2 feet tall

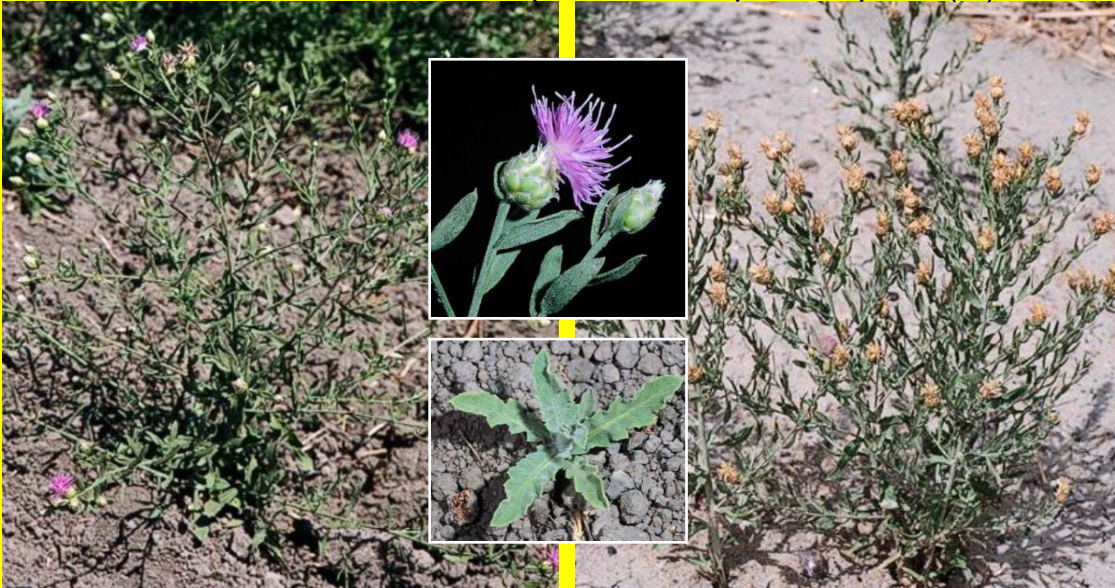
**Leaves:** Rosette leaves deeply divided, stem leaves grayish and reduced

**Flowers:** Pink to pale purple, numerous few-flowered heads

**Flower Bracts (Phyllaries):** Recurved to spreading, terminal spine longer than lateral spines

**Bloom:** June to August

Russian Knapweed - *Acroptilon repens* (L.) DC.



**KNF Priority: HIGH**

**Habitat:** Roadsides, fields, pastures, cultivated areas

**Life Cycle:** Rhizomatous perennial that forms dense stands, black roots

**Height:** 1-3 feet tall

**Flowers:** White, pink or lavender discoid flowers

**Flower Bracts (phyllaries):** Several overlapping rows, of greenish bracts with broad papery margins and no spines.

**Fruits:** Many small seeds disperse near parents, viable for 2-3 years

**Bloom:** May to September



## MuskThistle – *Carduus nutans* L.



**KNF Priority: HIGH**

**Also Known As:** Nodding Thistle

**Habitat:** Roadsides, fields, pastures, waste and disturbed areas

**Life Cycle:** Biennial or Winter Annual from fleshy tap-root

**Height:** 2-6 feet tall

**Leaves:** Spiny margined leaves extend down stem as spiny wings

**Flowers:** Large (1.5-3in) rose-purple, solitary, terminal, often nodding

**Flower Bracts (phyllaries):** Broad and spine tipped

**Bloom:** July to November



Canada Thistle– *Cirsium arvense* (L.) Scop.



**KNF Priority: MODERATE**

**Habitat:** Disturbed moist, sunny areas, pastures, rangelands, forests, riparian areas

**Life Cycle:** Perennial, deep spreading roots with creeping lateral roots

**Height:** 1-4(6.5) feet tall

**Leaves:** Rosettes not well defined, leaves are oblong to lance-shaped, spiny, irregular margins, upper leaves reduced

**Flowers:** pink-purple flowers, flower heads are tear-drop shaped, bracts are spineless, male and female plants separate

**Seeds:** Dispersed by wind

**Bloom:** June to September

Italian Thistle – *Carduus pycnocephalus* L.



**KNF Priority: HIGH**

**Habitat:** Dry woodlands, chaparral, roadsides, fields, and waste areas

**Life Cycle:** Annual, occasionally biennial from fleshy tap-root

**Height:** 1-6 feet tall

**Leaves:** Deeply lobed, spine-tipped leaves extend down stem as spiny wings

**Flowers:** Pink to purple in small clusters of 2-5

**Seeds:** Produces 2 types, inner are silver and wind dispersed, outer are brown and fall with flower-heads. Seed can be viable for 10 years

**Bloom:** February to June

Scotch Thistle – *Onopordum acanthium* L.



**KNF Priority: HIGH**

**Habitat:** Disturbed areas, roadsides, rangelands, and waste sites

**Life Cycle:** Biennial from fleshy taproot

**Height:** 2 – 8 feet tall

**Stems:** Broad winged and spiny, dense matted hairs, with gray-blue appearance

**Leaves:** Rosette up to 2 feet wide. Stems leaves large, alternate, oblong, prickly with irregular margins

**Flowers:** Purple flower heads flat, involucre bracts with pale orange spines

**Bloom:** May to August

Taurian Thistle – *Onopordum tauricum* Willd.





**KNF Priority: HIGH**

**Habitat:** Disturbed areas, roadsides and waste sites

**Life Cycle:** Biennial or short-lived perennial from taproot

**Height:** 3 – 8 feet tall

**Stems:** sticky, glandular, conspicuously spiny winged

**Leaves:** Bright green, acutely triangular, toothed lobes, covered in small hairs

**Flowers:** Singular bright purple to pink flower heads, involucre bracts numerous and spiny

**Bloom:** May to August



Yellow Star-thistle – *Centaurea solstitialis* L.



**KNF Priority: HIGH**

**Habitat:** Dry open areas, pastures, roadsides, widespread

**Life Cycle:** Annual from tap-root

**Height:** 0.5 - 4 feet tall

**Leaves:** Rosette leaves deeply lobed, stem leaves narrow and entire, extend down stem giving a wavy-winged appearance

**Flowers:** bright yellow and spiny

**Flower Bracts (Phyllaries):** Green bracts with stiff spines up to 2"

**Bloom:** April to September

Houndstongue– *Cynoglossum officinale* L.



**KNF Priority: HIGH**

**Habitat:** Dry habitats, open woodlands, disturbed areas, roadsides, fields

**Life Cycle:** Biennial or short-lived perennial from a deep tap-root

**Height:** 1 to 4 feet tall

**Leaves:** Rosette leaves softly pubescent and tongue shaped, stem leaves long and narrow, reduced above

**Flowers:** Purple to dark red, small, in long, coiled inflorescences

**Fruits:** Four nutlets with barbed hooks and raised edges, easily cling to animals and clothing

**Bloom:** May to July

## Dyer's Woad – *Isatis tinctoria* L.



Left picture by S. Orloff, lower inset by M. Knight, upper inset and right picture © Br. Alfred Brousseau, Saint Mary's College

**KNF Priority: MODERATE**

**Also Known As:** Marlahan Mustard

**Habitat:** Roadsides, fields, pastures, disturbed areas, openings in forests

**Life Cycle:** Winter annual, biennial, short-lived perennial from deep tap-root

**Height:** 1-4 feet tall

**Leaves:** Blue-green with prominent central, white vein. Basal rosette, cauline leaves sessile and arrowhead-shaped

**Flowers:** Small, 4-parted, yellow flowers in dense flat-topped clusters

**Fruits:** Flat, oblong, purple-brown seed pods hang pendant

**Bloom:** April-July



## Whitetop– *Cardaria draba* (L.) Desv.



**KNF Priority: MODERATE**

**Habitat:** Disturbed open areas, moist, alkaline soils

**Life Cycle:** Perennial from deep, spreading roots

**Height:** 0.5 – 2 feet tall

**Stems:** Branched near top, covered with short hairs, plant has blue-green appearance

**Flowers:** white, 4-petaled, clustered and appearing flat topped

**Fruits:** Oval to heart shaped pods, containing 2 seeds

**Bloom:** March to August



Lens-podded Whitetop– *Cardaria chalepensis* (L.) Hand.-Maz.



**KNF Priority: MODERATE**

**Habitat:** Widely distributed, in fields and along roads

**Life Cycle:** Strongly rhizomatous perennial, often growing in colonies

**Height:** 0.5 – 2 feet tall

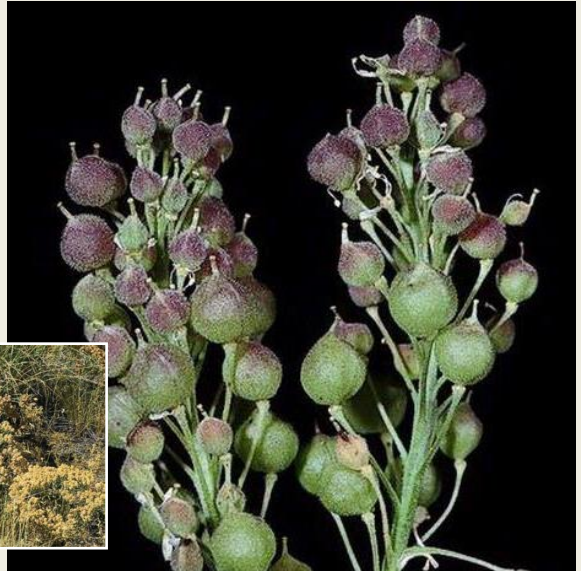
**Stems:** Branched near top, covered with short hairs

**Flowers:** white, 4-petaled, clustered and appearing flat topped

**Fruits:** Round, inflated pods, not notched at base or indented along seam

**Bloom:** May to June

Hairy Whitetop– *Cardaria pubescens* (C.A. Mey) Jarmol.



**KNF Priority: HIGH**

**Habitat:** Disturbed open areas, wildlands, fields, roadsides

**Life Cycle:** Perennial from deep, spreading roots

**Height:** 0.5 – 1.5 feet tall

**Stems:** Branched near top, covered with short hairs

**Flowers:** white, 4-petaled, clustered and appearing flat topped

**Fruits:** Strongly inflated pods, round to oval, glandular-hairy

**Bloom:** April to September

## Perennial Pepperweed – *Lepidium latifolium* L.



**KNF Priority: HIGH**

**Habitat:** Riparian areas, wetlands, grasslands, pastures, and roadsides

**Life Cycle:** Erect perennial forb from a coarse, deep, widely spaced root system

**Height:** 1 to 3 (8) feet tall

**Leaves:** Basal leaves long petioled, cauline leaves alternate, reduced above

**Flowers:** Many small white flowers in a panicle, four parted

**Fruits:** Flattened, elongated pods containing tiny red-brown seeds

**Bloom:** May to July



Leafy Spurge – *Euphorbia esula* L.



**KNF Priority: HIGH**

**Habitat:** Disturbed areas, riverbanks, roadside, pastureland, praires

**Life Cycle:** Perennial from massive, deep, widely spreading, and persistent root system

**Height:** 2 to 3 feet tall

**Stem and Leaves:** Umbrella-like branching, numerous linear leaves near the inflorescence and along stem, milky latex that can irritate skin and eyes

**Flowers:** Flowers reduced lacking petals, in "3's", subtended by yellow-green heart shaped leaves

**Fruits:** Small 3 chambered capsule

**Bloom:** May to August



Scotch Broom – *Cytisus scoparius* (L.) Link.



**KNF Priority: HIGH**

**Habitat:** Disturbed areas, riverbanks and corridors, roadsides, logged or burned areas

**Life Cycle and Height:** Woody, perennial shrub 6 to 10 feet tall

**Stem and Leaves:** Green stems with prominent ridges, few leaves with 1-3 oblong leaflets, soft hairy

**Flowers:** Bright yellow pea flowers are produced before leaves and are densely arranged along stem

**Fruits:** Greenish brown-black legume pods, flattened, 1-2 inches long, hairy only on edges; viable in soil for at least 50-years

**Bloom:** March to May

French Broom – *Genista monspessulana* (L.) L. Johnson



**KNF Priority: HIGH**

**Habitat:** Roadsides, oak woodlands, chaparral, open mixed conifer forest

**Life Cycle:** Woody, evergreen shrub from deep spreading taproot

**Height:** Up to 8 feet tall

**Stem:** Green, densely clustered stems covered in silvery hairs

**Leaves:** Leafy, deciduous, typically 3 leaflets, soft-hairy

**Flowers:** Yellow pea flowers born in leaf axial

**Fruits:** Legume pods, densely silky hairy

**Bloom:** March to May

Perennial Sweet Pea – *Lathyrus latifolius* L.



**KNF Priority: LOW**

**Habitat:** Open sunny areas, drought tolerant, old homesteads

**Life Cycle:** Perennial climbing vine

**Height:** 3 to 6 foot long vine

**Stem:** Hairless and strongly ridged/winged

**Leaves:** Alternate, 2-compound leaflets with a branched tendril in between

**Flowers:** Purplish pink pea flowers, born in axial of leaves

**Fruits:** Hairless pods that splits open into curled segments along seams shooting seeds from plant

**Bloom:** May to September



## Cheat Grass – *Bromus tectorum* L.



Pictures by: J.M DiTomaso and E.A. Healy, © 2007 Weeds of California and other Western states, The Regents of the University of California, Cassandra Skinner. [Bureau of Land Management](http://www.bureauoflandmanagement.com). United States, ID, Bureau of Land Management Jarbidge Resource Area. May 16, 2007



**KNF Priority: LOW**

**Habitat:** Roadside, rangelands, cultivated fields, dry open conifer forests, widespread

**Life Cycle:** Winter or spring annual from robust, spreading lateral and vertical roots

**Height:** 1 to 30 inches, rapid grower, variable by site characteristics

**Fruits:** Prolific seeders, 25 to > than 5,000.

**Seed Banks:** Seeds can remain viable for 5-12 years. Seeds typically germinate as soon as conditions permit

**Bloom:** May to June

Medusahead – *Taeniatherum caput-medusae* L.



**KNF Priority: LOW**

**Habitat:** Cultivated fields, pastures, heavily grazed areas, roadsides, often found growing or competing with cheatgrass

**Life Cycle:** Cool season annual grass

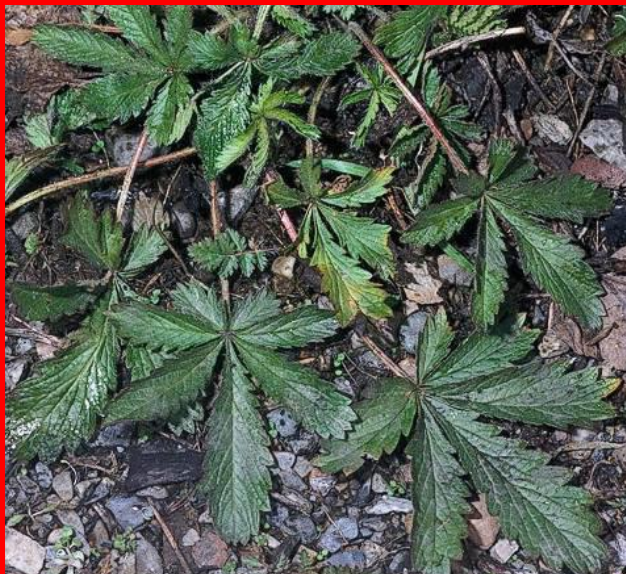
**Height:** 0.5 to 2 feet tall

**Leaves:** Very few leaves, typically mostly stems are produced

**Flowers:** 2-3 spikelets per nodes each with one seed, 2 awns on each spikelet, the longer awn has erect barbs

**Bloom:** April to July

Sulphur Cinquefoil – *Potentilla recta* L.



**KNF Priority: HIGH**

**Habitat:** Disturbed areas, pastures, roadsides, waste areas, and burns

**Life Cycle:** Perennial forb from woody taproot

**Height:** 0.5 to 3 feet tall

**Leaves:** Palmately compound with 5-7 leaflets, covered with sparse stiff hairs, upper leaves with reduced petioles and fewer leaflets

**Stems:** Covered with perpendicular hairs about 1/8" long

**Flowers:** Many white to creamy orange flowers in open, branched, flat-topped inflorescence

**Bloom:** May to August

Puncture Vine – *Tribulus terrestris* L.



**KNF Priority: HIGH**

**Also Known as:** Goatheads

**Habitat:** Highly disturbed areas, compacted soils, roadsides, crop fields

**Life Cycle:** Summer annual from an extensive root system

**Height:** Stems grow prostrate along the ground, up to 5 feet long

**Leaves:** Pinnately compound with 3-7 leaflets, hairy

**Flowers:** Bright yellow, five-parted, born in leaf axial, only open on sunny days

**Fruits:** Woody, five-lobed bur, separates into 4-5 nutlets with stout spines and several short prickles

**Bloom:** March to October